

Brooks Air Force Base
San Antonio, Texas
www.afcee.brooks.af.mil

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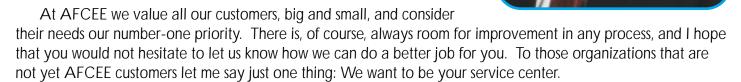
This report is available online at http://www.afcee.brooks.af.mil/report

#### From the Director

This Fiscal Year 1999 Annual Report offers a glimpse into what was an outstanding and productive year for the Air Force Center for Environmental Excellence.

Like most business reports, however, it barely touches the surface. It does not show, for example, the many extra hours that AFCEE staff members put in to meet deadlines or take care of unexpected situations. Or the trips they took throughout the United States and around the world to assist the Air Force in accomplishing its critical mission.

I am proud of the Center and the important work the staff does here. Our goal is simple: to make the Air Force environmental program the best in the Department of Defense. I believe that in fiscal year 1999 we made some long strides toward meeting that standard. In the process, we made the United States - and the world - a cleaner and safer place for future generations.





AFCEE is striving to be an indispensable part of the Air Force family. We will achieve that goal through the concepts presented in the graphic shown on the left. I consider them the keys to our success.

#### Easiest to work with

We want to be the easiest agency you will ever work with. We want to make

AFCEE a "seamless" organization so that when you call on us it will be as if you were dealing with a friendly yet efficient neighborhood store where you will find what you are looking for with the least amount of hassles. And we will always be ready to listen to your ideas.

#### Anything the Air Force Needs

Whether it concerns your environmental program or a construction and design project, we will do everything within our means to meet your needs. We never forget that you are the reason we exist in the first place.

#### **Exceed Expectations**

We want to show that the confidence you have in our abilities was well founded. We can do that by going beyond the routine, by not just meeting your expectations but by exceeding them. We will do whatever it takes to continue earning your trust.

Together with our customers, AFCEE made a lot of progress in FY99 and we at the Center look forward to working with you for even more productive years to come.



#### All About the Air Force Center for Environmental Excellence

The Air Force Center for Environmental Excellence, with headquarters at Brooks AFB, Texas, is a field-operating agency of the Air Force Civil Engineer.

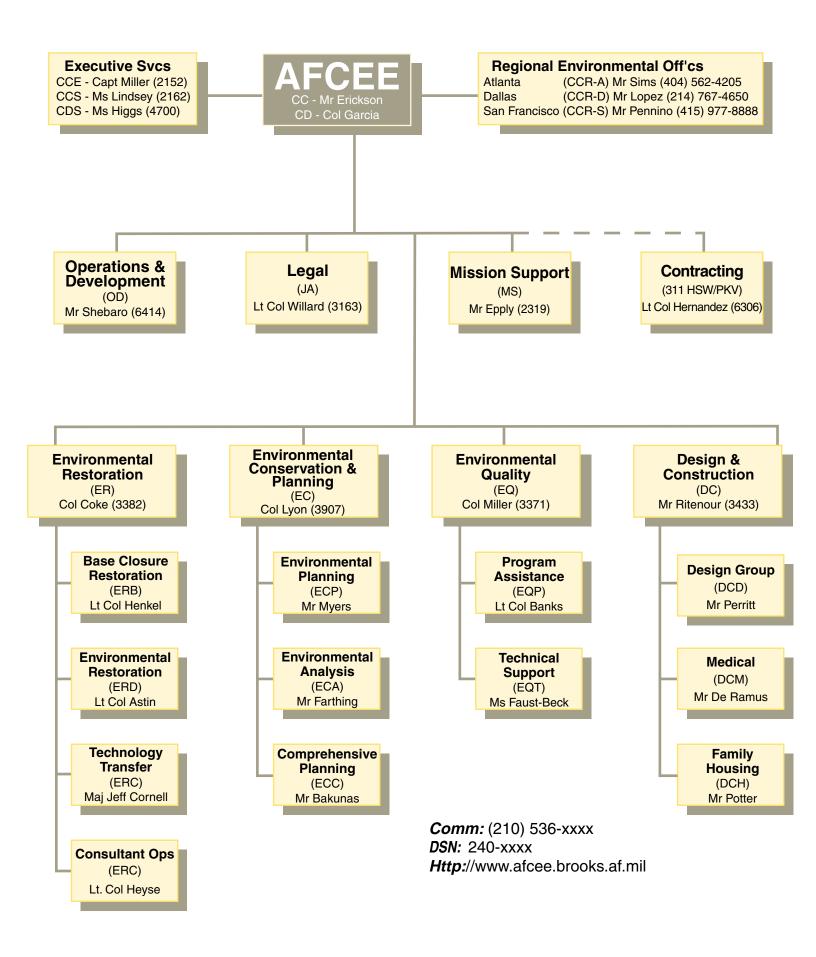
AFCEE is the Air Force's premiere center of expertise and service center, offering commanders a full-range of technical and professional services in the areas of environmental restoration, pollution prevention, natural and cultural resources conservation, design and construction management, and comprehensive planning.

The Center also maintains three Regional Environmental Offices, located in Atlanta, Dallas and San Francisco. These REOs advocate Air Force and Department of Defense interests to federal, state and local agencies as a means of facilitating DOD environmental compliance and management throughout the various regions of the country.

A civilian director, a member of the Senior Executive Service, heads AFCEE. The director is assisted by an executive director, an Air Force colonel who serves also as the commander of the center's military personnel.

The AFCEE-wide staff consists of 378 authorized civilian personnel and 50 military members. AFCEE also relies on 45 contractor employees who provide technical assistance in computer operations and other specialized areas. The majority of the agency's multiskilled and technically competent people have degrees in engineering and the sciences, including such diverse fields as architecture, hydrogeology, wildlife biology and chemistry. Many of them also are professionally registered or certified in their respective disciplines.

As a whole, the Center forms a comprehensive team dedicated to providing a full range of services to Air Force commanders and other DOD customers.



# **AFCEE Support Picture**

Customer support in FY99 amounted to almost \$400 million in funds obligated for work contracted by AFCEE and more than \$132 million for projects managed, but not contracted, by the Center.

# Work Contracted by AFCEE in FY99

Customer	Amount of program
Air Combat Command	\$18,052,000
Air Education and Training Command	43,769,000
Air Force Base Conversion Agency	59,498,000
Air Force Materiel Command/Aeronautical Systems Center	36,485,000
Air Force Space Command	39,027,000
Air Mobility Command	19,719,000
Pacific Air Forces	31,794,000
United States Air Forces Europe	12,357,000
11th Support Wing (Bolling AFB, D.C.)	182,000
Massachusetts Military Reservation	42,380,000
NAS Fort Worth (Carswell AFB, Texas)	2,768,000
Innovative cleanup technologies	5,137,000
Environmental Restoration Program Information Management System	1,706,000
Third Party Sites	300,000
Army (in support of the Massachusetts Military Reservation)	27,844,000
Пачу	23,000
Small DOD customers (OBANS/616/MIPR)	50,010,000
NASA	2,855,000
Total	\$393,906,000

# Work Contracted by Other Agencies

Medical Construction	\$61,830,000
Military Family Housing Construction	70,670,000
Total	\$132,500,000

Following is a directorate-by-directorate account of the Center's successes and accomplishments in FY99.

### **Environmental Restoration (ER)**

(Tel: 210.536.3383/DSN 240.3383)

Environmental Restoration executes environmental cleanup activities, including remedial investigations, remedial design, remedial actions and long-term maintenance operations for designated closure and active bases. In connection with these activities, ER does technical oversight of environmental programs, performs laboratory quality assurance assessments, reviews documents and assists in selecting remediation technologies. Additionally, the organization serves as the focal point for technology evaluation, application and transfer from the laboratory to the field. ER is comprised of the Base Closure, Consultant Operations, Environmental Restoration and Technology Transfer divisions.

### Base Closure Division (ERB)

(Tel: 210.536.5255/DSN 240.5255)

The Base Closure Division awarded nearly \$59.5 million worth of Base Conversion Agency projects in FY99 and has approximately \$425 million in on-going work. The division had several significant achievements during the fiscal year. These included bringing three former Air Force bases to last remediation in place (LRIP) status and awarding \$16.4 million and \$10.5 million for restoration programs at Chanute AFB, Illinois, and Castle AFB, California, respectively.

When the Kelly AFB, Texas, program transitioned from an active to a Base Conversion Agency program, the division played a bigger role than had been planned, awarding contracts for an additional 30 percent of the cleanup program's cost. Further, McClellan AFB, California, in its transition from in-house to service center execution, completed a memorandum of agreement (MOA) that will bring more and more of the base's business to AFCEE. The Center expects to receive 40 percent of McClellan's program in FY2000 and 80 to 100 percent in FY2001. The Air Force Reserve also chose AFCEE as its service center, giving ERB 100 percent execution of the Homestead AFB, Florida, program.

# Consultant Operations Division (ERC)

(Tel: 210.536.5282/DSN 240.5282)

## Third Party Sites

The Consultant Operations Division began using its scientific expertise to assist the Air Force Legal Services
Agency/Environmental Division and Department of Justice in third party site buyouts and forensic investigations. This new program had immediate success with its first assignment. MASS-PORT, the State of Massachusetts transportation agency, wanted the Air Force to pay \$2 million to clean up polychlorinated biphenyls (PCB) contamination found on a site that Hanscom AFB had leased 25 years ago. However, the ERC forensic team found evidence that contradicted the state's claim. The result is that U.S. taxpayers will not have to pay for much of the cleanup expense. The Justice Department sent the team a letter of appreciation for its work on that case. The forensic team is currently active in providing technical buyout support to sites in Oklahoma and New York.



**Solvent solution** - Jim Williams, far right, Consultant Operations Division, and other representatives investigate the Solvent Savers site in New York to assess the Air Force's liability for contamination at the facility.

#### **Remedial Process Optimization**

The Air Force cleanup program is transitioning from site discovery, investigation and decision-making to one of long-term operation, maintenance and monitoring of remediation systems. ERC and the Technology Transfer Division (ERT) are assisting in this effort by developing and testing processes that may optimize and expedite cleanup and closure of contaminated sites. The organizations are also developing the Remedial Process Optimization Handbook, a guide to help managers enhance the effectiveness and efficiency of the cleanup process.

Input from environmental experts in the Department of Defense and the Environmental Protection Agency was solicited in producing the handbook, and it uses the best of existing tools developed by the three services and the EPA. AFCEE is testing the protocols and tools contained in the publication at six bases. Two tests were completed in FY99 and three scoping visits to Air Force Materiel Command bases were conducted to identify opportunities for implementing remedial process optimization strategies.

### **Cost and Scheduling Tools**

ERC developed a new productivity tool for remedial project managers (RPMs) in FY99. The Critical Path Planning Toolbox assists RPMs in building and maintaining comprehensive schedules-to-complete for cleanup work under the Installation Restoration Program (IRP). Using a variety of overview and planning tools, the package leads the environmental manager through the entire IRP process for any site, from discovery through site closeout. While the tools in the package are for the most common approach to site management, they also ask the user to consider alternate approaches and creative management steps that may streamline the traditional IRP process. As such, the tools not only help the user plan ahead but also identify potential streamlining approaches.

## **Environmental Restoration Division (ERD)**

(Tel: 210.536.5291/DSN 240.5291)

## **Defense Energy Support Center**

The Defense Logistics Agency's Defense Energy Support Center (DESC) has responsibility for facilities that provide fuel to the Department of Defense. AFCEE has been supporting DESC in the area of environmental projects related to the repair and upgrade of fuel lines and tanks. The Center's work for DESC has grown substantially. Through FY98, AFCEE has annually executed from \$1 million to \$2 million worth of projects for DESC. In FY99, the program grew to its current workload of about \$15 million for projects in WestPac (Japan and Korea), \$8.5 million for Guam and \$5 million in the continental United States. AFCEE's success in executing and managing these projects has resulted in continued growth in the DESC work, which is projected to be from \$20 million to \$30 million in FY00 and from \$30 million to \$50 million in FY01.

### F.E. Warren AFB, Wyo.

AFCEE successfully assisted F.E. Warren AFB in developing a Master Restoration Schedule (MRS) that lists tasks necessary to progress each Installation Restoration Program site through the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process to closure. Major milestones from this list of 5,900 specific tasks were incorporated into the Federal Facility Agreement. This has created the framework to help F.E. Warren meet every FFA milestone since the creation of the MRS. A program that had spent over \$60 million but had been unable to successfully complete any remedial actions was turned around, to one that last year completed four remedial actions. This was achieved by fostering a team-building relationship between the base and regulatory community. The relationship has gone from one of mistrust to one of cooperation focused on bringing sites to closure.

#### Lackland AFB, Texas

AFCEE and Lackland AFB successfully negotiated with the Texas Natural Resource Conservation Commission (TNRCC) regarding the treatment and placement of lead-contaminated soil at the base. These negotiations resulted in a savings to the Air Force of over \$5 million in soil disposal costs. TNRCC approved plans to treat and then place an estimated 50,000 cubic yards of soil from a closed small arms range onto an adjacent landfill that is no longer in operation. This process is beneficial in several aspects: it prevents 50,000 cubic yards of treated soils from filling up nearby landfills; it prevents the soils from being transported on public roadways for disposal; and it results in a substantial cost savings for the government.

### Massachusetts Military Reservation (MMR)

The main emphasis at MMR in FY99 was on remedial construction. Two new berms were built to physically separate two cranberry bog systems from river water contaminated with ethylene dibromide (EDB). Also, two extraction, treatment and reinjection (ETR) systems began operating in the largest plume, CS-10. In September, a third ETR began operating in the LF-1 plume. Additionally, two recirculating wells were successfully installed in the SD-5S plume. Their installation, in underground vaults in the middle of a residential neighborhood, took place after an intense community involvement effort. Two other ETR systems also are under construction. Meanwhile, investigations continued on two ponds and a marine harbor. Several Records of Decision (ROD) were issued for soil cleanup, and five plumes were discussed at public comment periods. In fact, community involvement continued at a fast tempo, with dozens of public and neighborhood meetings taking place. The MMR program has turned the corner. The community and regulators now view AFCEE, because of its professionalism and community-based approach, as a member of the team.



Searching for contamination
- AFCEE contractor representatives take groundwater samples from beneath Johns Pond in Mashpee, Mass., looking for solvent contamination coming from the Massachusetts Military Reservation.

Cleaning up - Multiple drill rigs install groundwater extraction wells for a storm drain plume extraction, treatment and reinjection project in Massachusetts.



### **United States Air Forces Europe (USAFE)**

The Headquarters USAFE Civil Engineer Environmental Division initiated the production of a command-wide Environmental Management Plan that captured environmental compliance points at each installation and prioritized corresponding environmental actions based on vulnerability. This aggressive action has enabled the command to accurately program effective projects to minimize risk to mission and ensure compliance with host nation environmental regulations. The USAFE program, managed through AFCEE, grew from \$5 million in FY98 to more than \$12 million in FY99. It is projected to exceed \$20 million in FY00.

#### Galena Airport, Alaska

More than 4,000 drums that had been lying in the woods around Galena for several years were removed through a contract with Arctic Slope Construction, Inc. The drums were located, characterized, manifested and transported off site for recovery and disposal. The removal contract was the result of a successful partnership between Arctic Slope and Yukaana Development Corporation, a subsidiary of the Louden Tribal Council. The project also included successfully negotiating access to lands owned by Gana-A-Yoo, the local Galena tribal government. Besides helping to clean the environment around Galena, the project reaped other benefits, such as enhanced government-to-government relations and improved local-hire practices.

# **Technology Transfer Division (ERT)**

(Tel: 210.536.4331/DSN 240.4331)

### Diego Garcia

ERT prepared and is executing a cleanup plan for three fuel spill sites on the Indian Ocean island of Diego Garcia. The plan relies on the use of innovative bioslurping technology to recover fuel from the subsurface. Natural attenuation and bioventing will be used to degrade residual fuel that cannot be recovered. ERT and Pacific Air Forces Command are currently executing the cleanup plan. Total cost of the cleanup is estimated at \$385,000. Cost avoidance benefits resulting from this project total from \$7.4 million to \$10.6 million. These estimates are based on the cost of the cleanup project using other methods.



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On the scene - Jerry Hansen, Environmental Restoration Directorate, left, and Air Force fuels master Hershel LeMaster, middle, show British representative Royal Navy Cmdr. Stuart Watt the workings of a bioslurper cleanup system on the island of Diego Garcia.

#### **Natural Attenuation**

The Environmental Protection Agency revised and distributed a technical protocol developed by ERT and released it as an EPA publication. The publication deals with evaluating the natural attenuation of chlorinated solvents in ground water. The publication's release is the capstone of a multi-year effort to evaluate natural attenuation. ERT started examining natural attenuation in 1993. Since that time more than 80 Air Force sites have been evaluated and natural attenuation has become a widely accepted remediation technology. Regulatory agencies have approved natural attenuation as the whole or part of the remedy at 17 Air Force sites and at dozens of other government and industry sites nationwide. ERT expects natural attenuation to be accepted as part of the remedy at additional sites as regulatory negotiations continue.



**Transplants** - Vegetation taken from other parts of Loring AFB, Maine, awaits transplanting at a restored 25-acre wetland area on the installation. AFCEE was the program coordinator for the Loring wetland restoration project, considered the largest of its kind in the Northeast.

### Feasibility Study

A Focused Feasibility Study Report for the Massachusetts Military Reservation Landfill 1 (LF-1) was prepared under an effort directed, funded and managed by ERT. The report used AFCEE-developed techniques to investigate the potential for reducing site remediation costs at the landfill by using the naturally occurring assimilative capacity in the subsurface versus traditional pump-and-treat technologies. Based on the results of this project, the installation of a large pump-and-treat system was cancelled in favor of a smaller system that works in conjunction with monitored natural attenuation. Cost avoidance from this effort is estimated as \$120 million over the life of the project.

#### **BIOCHLOR**

BIOCHLOR, a simple and easy to use groundwater computer software model, is the latest analytical tool developed through the AFCEE Broad Agency Announcement program. The technology is designed to quickly tell the remediation program manager what the likelihood is that a site contaminated with chlorinated solvents will attenuate naturally. Developed for AFCEE by Groundwater Services Inc., the model has been successfully peer reviewed by the EPA. It is in the process of being transferred to the agency for long-term support and distribution as public domain software available for use by the general public. BIOSCREEN, a similar modeling tool intended for natural attenuation of fuels, was transferred to the EPA several years ago and is now the most downloaded software model in the agency's inventory. Data from the EPA Web site indicate that BIOCHLOR will be just as popular.

# **ER's Ongoing Program**

Aeronautical Systems Center (AFMC)	\$18,400,000
Air Combat Command	34,800,000
Air Education and Training Command	40,200,000
Air force Base Conversion Agency	451,000,000
Air Force Center for Environmental Excellence (includes MMR)	225,500,000
Air Force District Washington	2,800,000
Air Force Materiel Command	94,500,000
Air Force Space Command	76,000,000
Air Force Special Operations Command	5,700,000
Air Mobility Command	86,000,000
Pacific Air Forces	129,000,000
United States Air Force Academy	3,000,000
United States Air Forces Europe	19,500,000
Other DOD	11,000,000
Third Party Sites	1,100,000
NASA	1,500,000
Other Non-DOD	2,100,000

Total	\$1,202,100,000
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### **Environmental Conservation and Planning (EC)**

(Tel: 210 536 3907/DSN 240 3907)

Much of Environmental Conservation and Planning's work has direct and immediate impact on the Air Force mission. The directorate serves as the center of expertise for the Air Force Environmental Impact Analysis Process (EIAP), executes the Air Force's Natural and Cultural Resources programs and is the focal point for the Air Force Comprehensive Planning Program.

EC is involved in issues such as environmental impact statements, baseline surveys, forestry, wildlife, archaeology, Native American consultations, transportation, air space and range management, and noise. EC also staffs planning assistance teams that travel throughout the world to help Air Force organizations solve base planning issues.

EC is made up of three divisions: Environmental Analysis, Environmental Consultant and Environmental Planning.

# **Environmental Analysis Division (ECA)**

(Tel: 210.536.3802/DSN 240.3802)

ECA was involved in a number of successful accomplishments in the areas of Environmental Impact Statement (EIS), Environmental Assessment (EA) and Environmental Baseline Survey (EBS):

- Assisted Air Force Space Command complete the EIS
  process for dismantling the Minuteman III missile system at
  Grand Forks AFB, N.D. Doing so was essential for complying with the Strategic Arms Reduction Treaty (START).
- ECA staff managed the environmental assessment for the space missle centers Evolved Expendable Launch Vehicle (EELV). The EELV will become the primary satellite launcher for both military and civilian payloads
- ECA was able to complete an environmental assessment in time to meet regulatory requirements for booster vehicle verification test launches in the year 2000 to be conducted by Air Force Space Command at Vandenberg AFB, California, in support of the National Missile Defense Program.
- ECA prepared EBSs ranging in size from single facilities to entire bases, both in-house and by contract. Division members also represented Air Force interests in developing the standards published by the American Society of Testing Materials (ASTM) for preparing EBSs for Department of Defense real property transfers and are currently involved in revising the April 1994 version of Air Force Instruction 32-7066, also dealing with EBS preparation.

#### Clean Air Act Program

EC provides technical and contractual assistance in support of the General Conformity Rule under the Clean Air Act. Past contractual work has evolved to include more and more air compliance related projects such as air emissions inventories, permit applications, cost of compliance, compliance through pollution prevention, stack testing and air quality management plans. EC currently manages air quality projects totaling approximately \$4 million per year.

The EC air quality manager has performed technical EIS and EA reviews for a number of programs, including the F-22 aircraft production and acceptance testing and F-22 bed-down at Nellis AFB, Nev. Other FY99 accomplishments in the air quality program include participation in several working groups, such as the Clean Air Act Steering Services Committee, the General Conformity working group and the AFCEE and Major Command Air Quality Committee.

Aside from project management services, EC also provides technical consultations and prepares technical papers for presentation at the Air and Waste Management Association annual conference.

### Consultant Division (ECC)

(Tel: 210.536.4207/DSN 240.4207)

#### Air Installation Compatible Use Zone (AICUZ)

During FY99, ECC provided a wide range of services supporting the AICUZ Program and noise analysis associated with environmental planning. For example, staffers conducted aircraft data collections at Eglin and Patrick AFBs, Fla., and Misawa Air Base, Japan, in order to develop updated noise footprints for these installations.

### Natural and Cultural Resources Programs

Through its Consultant Division, EC provides project management services to the major commands and installations, and technical support to AFCEE staff in functional areas related to natural and cultural resources.

#### In this area:

- EC's oversight of a fairy shrimp issue at Travis Air Force Base, California, was instrumental in ensuring that a major housing project was not delayed as a result of U.S. Fish and Wildlife Service regulatory requirements governing threatened and endangered species.
- The Air Force archaeologist in ECC compiled the service's portion of the Federal Archaeology Report to Congress, represented the Air Force on the Department of Defence Integrated Product Team for Curation of Archaeological Collections and assisted in formulating Air Staff policy regarding archaeological survey and evaluation.
- The division managed the Enchanted Skies Park and Observatory environmental impact statement and American Indian consultation for the Air Force Office of Scientific Research.



**Micro-shrimp** - The microscopic California fairy shrimp is another species studied by an AFCEE managed survey at Travis AFB, Calif.

Ecc also provides technical expertise and management support for the Air Force's reimbursable conservation program. It works with the major commands, installation managers and the Defense Finance and Accounting Service to account for the proceeds and expenditures from the management of agricultural leases, forest product sales and hunting and fishing programs on Air Force installations.

In addition to accounting for program proceeds from the management of agricultural leases, forest product sales and hunting and fishing programs, ECC also consolidates and promotes command request for the redistibution of program proceeds back to the installations for support of conservation programs.

### **Environmental Planning Division (ECP)**

(Tel: 210.536.3384/DSN 240.3384)

### F-22 Testing and Beddown

ECP supports the F-22 Program Office as well as the planned operational program by evaluating the environmental effects of several major segments of the F-22 program, including operational test and Air Combat Command evaluation and production testing. The F-22 is the Air Force's latest fighter aircraft.

The division assisted with an EIS to analyze the potential environmental consequences of the proposed beddown of the F-22 and the aircraft's weapons school at Nellis AFB, Nevada. Analysis included the possible effects of 17 aircraft performing 4,472 sorties annually, the location of 367 personnel and construction of associated support facilities. Use of the Nellis Range Complex by F-22 aircraft also was analyzed. The study was released to the public in October 1999.

#### **Privatization**

The division managed the preparation of 29 Environmental Baseline Surveys (EBS) for the Air Force Civil Engineer Support Agency (AFCESA) utilities privatization program and surveys for a Texas regional demonstration program funded by the Defense Energy Support Center. ECP has now completed an EBS for all Texas bases.



**Worldwide support** - Roger Blevins of AFCEE's Environmental Conservation and Planning Directorate arrives in Hungary as part of a 90-day assignment with an Air Force team studying different European sites that could be used to support contingency operations in the region.

### Geographic Information System (GIS) Program

After being given the responsibility for implementation of GIS technology in 1998, the division:

- established working relationships with all major command GIS points of contact;
- hosted an Air Force/contractor workshop to develop the foundations for the GeoBase geospatial information sharing concept; and
- is developing a strategic plan for the use of GIS at AFCEE. To support the plan, the division has established a process improvement team to evaluate and recommend improvements to all GIS processes within the center.

The Division also participates as a member of the corporate staff of the CADD/GIS Technology Center and chairs a GIS integrated process team for the Automated Civil Engineer System being developed by AFCESA.

#### Other accomplishments

ECP issued its annual call for Military Traffic Management Command (MTMC) support for traffic and transportation planning studies. The call resulted in the completion of studies at eight bases.

The division provided technical assistance teams to support two military training route and range noise impact studies. It served also as the AFCEE representative to the Range Commander's Council Environmental Group. In addition, ECP coordinates AFCEE range planning efforts, which include noise analysis and detection and removal of unexploded ordnance.

# EC's Ongoing Program

Air Combat Command	\$714,992
Air Education and Training Command	3,759,687
Air Force Base Conversion Agency	10,549,623
Air Force Center for Environmental Excellence	5,025,995
Air Force Materiel Command	5,025,995
Air Force Reserve Command	63,966
Air Force Space Command	1,685,272
Air Force Special Operations Command	198,744
Air Mobility Command	2,255,670
Air National Guard	390,692
Other Customers (Including Air Staff)	157,899
Pacific Air Forces	1,763,295
United States Air Forces Europe	719,821

Total	\$32.311.651
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# **Environmental Quality (EQ)**

(Tel: 210.536.3371/DSN 240.3371)

Environmental Quality supports pollution-prevention and compliance programs worldwide. It does this by identifying pollution prevention/compliance opportunities and developing and executing strategic initiatives to identify and implement solutions to common Air Force pollution-prevention and compliance problems.

Through its management of PRO-ACT, an environmental information clearinghouse, the directorate disseminates data on successful programs and good ideas and technologies culled from throughout the Air Force and federal government. The PRO-ACT staff answers questions and supplies data free of charge to Air Force personnel and contractors worldwide. Information crossfeed also takes place via fact sheets, success stories and a regular publication called CrossTalk.

In FY99, EQ provided more than \$19.5 million worth of support to 15 major commands and organizations in development of risk management and hazardous material management plans, Clean Air Act Compliance Program support, pollution prevention opportunity assessments and many other areas.

EQ consists of the Program Assistance and Technical Support divisions.

### Program Assistance Division (EQP)

(Tel: 210.536.3340/DSN 240.3340)

#### **ECAMP**

EQP manages the Air Force Environmental Compliance Assessment and Management Program (ECAMP) which presently exceeds \$3 million and is expected to reach up to \$9 million. The program assists bases in assessing their compliance status using internal and external evaluations. In both types, the object is to find violations of environmental laws and regulations, covering everything from solid waste to air quality. Internal assessments are run by the bases themselves while external assessments are conducted by the bases' major commands. EQ is directly involved in helping the major commands with the external reviews.

#### **PRO-ACT**

PRO-ACT remains a perennial EQ - and Air Force - success story. Considered the Air Force's premiere environmental clearinghouse and research service, PRO-ACT provides assistance to active-duty Air Force, Air National Guard, Air Force Reserve, civilian personnel and Air Force contractors with active work orders. During FY99, PRO-ACT answered more than 1,500 technical inquiries in such areas as materials management, recycling, source reduction and solid-waste minimization. Also during the fiscal year, the PRO-ACT Web page received 422,000 "hits". Additionally, the service was honored with a local award in the government information exchange category presented by the San Antonio Corporate Recycling Council. Later, it received the council's statewide Environmental Vision Award, which recognizes programs that advance recycling and waste minimization.

Visit the PRO-ACT site at http://www.afcee.brooks.af.mil/pro\_act/pro\_acthome.asp or call 800.448.3938.

#### **Online Training**

EQP developed the online Shop-Level Pollution Prevention Training Course. The Internet course teaches students to identify and implement the P2 guidelines outlined in Air Force Instruction 32-7080. By making the course

available online, organizations are spared the time and expense associated with a traditional classroom format. Previously taught as a three-day classroom session, the Web-based course is self-paced and gives students more detailed information than they could receive in a classroom setting.

### Technical Support (EQT)

(Tel: 210.536.4222/DSN 240.4222)

#### **Pollution Prevention**

EQT's efforts in the area of pollution prevention continue to enjoy considerable success. These are a few examples of accomplishments in FY99:

The fiscal year saw a further expansion of the AFCEE-managed Air Force Environmental Management Information System (AF-EMIS), a computer software program used in managing all aspects of hazardous materials authorization, purchasing and distribution. The program tracks the creation of hazardous waste and its disposal and generates environmental reports. Now employed at 168 Air Force, Reserve and Guard installations worldwide, AF-EMIS is the preferred system for use by base hazardous materials pharmacies. It has proven to be an effective and economical pollution-prevention tool for all the Air Force major commands.

The Construction and Demolition (C&D) Waste Management Guide was developed by EQT. Serving as a blueprint, it covers everything from the planning stage to the creation of a program that executes, monitors and documents the diversion of non-hazardous C&D installation waste. The guide is directed primarily at base environmental flight solid waste managers and engineering project managers who will be affected by the Air Force's new emphasis on diverting non-hazardous solid waste away from the nation's landfills and incinerators.

AFCEE's former Affirmative Procurement Guide was completely redone and renamed the Guide to Green Purchasing. The guide incorporates the changes that came about as a result of Executive Order 13101 superseding EO 12873. Both of these orders require government agencies to consider environmentally preferable products and services when developing plans, drawings and work specifications for construction on government installations. The Guide to Green Purchasing has updated information, and instead of being a paper product it will be posted on AFCEE's Web site.



**Composting** - Students learn how to create a compost pile during an AFCEE-sponsored class on materials reuse and recycling.

### Compliance

EQT is developing a very much-needed tool - a dynamic Web site that contains compliance information on the 1990 Clean Air Act (CAA) Amendments. Projected to be fully operational by spring of 2000, the site's objective is to help base-level air quality and compliance managers remain current on the numerous and complex new provisions that directly impact Air Force installations. Much of this information is currently available in one form or another, but is not readily available to base personnel. The CAA Compliance Guidance Tool solves this problem.

# **EQ's Ongoing Program**

Air Combat Command	\$484,089
Air Education and Training Command	1,602,666
Air Force District Washington	182,389
Air Force Materiel Command	2,327,551
Air Force Reserve Command	410,027
Air Force Space Command	1,083,356
Air Force Special Operations Command	74,881
Air Mobility Command	4,193,140
Air National Guard	565,784
Air Staff	3,849,399
Pacific Air Forces	2,918,992
United States Air Force Academy	10,000
United States Air Forces Europe	1,646,479
NASA	188,584

Total	\$19,537,337
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### **Design and Construction (DC)**

(Tel: 210.536.3433/DSN 240.3433)

Design and Construction advances installation excellence and Air Force Quality of Life through standards and criteria development, and execution of sound design and construction management principles. This directorate is also the Air Force's center of expertise for architecture, interior design, landscape architecture, medical facility design and construction management, design-build delivery methods of construction and Military Family Housing (MFH) Privatization. Additionally, the organization develops, tests and documents new project management, acquisition and construction methodologies.

Other professional services provided by DC include design and construction agent responsibilities for MFH military construction, execution and maintenance of the Air Force Family Housing Master Plan, and program management of the Air Force Design Awards and Design and Construction Agent Awards Programs. The directorate also fields assistance teams (ATs) that help the major commands and installations in solving planning and design issues.

DC is composed of these divisions: Design Group, Housing and Medical.

### **Design Group Division (DCD)**

(Tel: 210.536.3547/DSN 240.3547)

The division completed the first phase of worldwide site visits for the Fitness Center Master Plan. The survey looked at fitness and health and wellness centers at 17 bases throughout the Air Force to see if they met the minimum standards established by the new Fitness Center Design Guide. Information gathered during the visits will be used to develop alteration, addition and/or replacement projects. In addition, Design Group fielded 42 Assistance Teams in FY99 and completed a number of design guides. These include the Fitness Center Design Guide, the Legal Facility Design Guide and the Interior Design Guide. The division also provided architectural-engineer contract support for completing the AF/ILE Strategic Plan. A new initiative, the Green Base of the Future (GBOF) Guide Concept, was completed and the final guide delivery order was funded and awarded.



**Award winner** - The Design and Construction Directorate was design and construction manager for the 910th Wing's new headquarters building at Youngstown Air Reserve Station, Ohio. The facility received a merit award for concept design from the 1999 U.S. Air Force Design Awards Program, managed by the Design Group.

### Housing Division (DCH)

(Tel: 210.536.3496/DSN 240.3496)

The DCH role in the Air Force family housing program expanded dramatically during FY99, particularly in the areas of privatization and family housing program support. The division began development of the Air Force Family Housing Master Plan which provides a corporate housing investment strategy that integrates and prioritizes traditional construction and operation and maintenance funding with private sector financing, resulting in a single "road map." The plan outlines the funding needed to meet the Defense Planning Guidance requiring all the services to revitalize, divest through privatization or demolish inadequate housing by or before FY2010.

**Housing the troops** - The Design and Construction Directorate was the design agent for this award-winning junior enlisted housing project at Vandenberg AFB. Calif.



### Medical Division (DCM)

(Tel: 210.536.3382/DSN 240.3382)

DCM began development of a new construction delivery method called design-build-plus (DB+) to better serve AFCEE customers. Although design-build (DB) is not new to the Air Force, DB+ is a variation of tried and proven construction delivery methods used by other government agencies, as well as the private sector. Using this method, two contractors, working under separate delivery orders and government oversight, team up and overlap to program, plan, design and construct a project. The objective of DB+ is to ensure that planning, programming, design, construction and project turnover is a continuous, seamless process from the customer's viewpoint. DB+ was conceived to leverage the government's shrinking workforce and maintain the number of facilities that are built on time, within established budgets and meet customer requirements.

# DC's Ongoing Program

Air Combat Command	\$105,769,000
Air Education and Training Command	151,016,000
Air Force Materiel Command	258,698,000
Air Force Space Command	130,813,000
Air Force Special Operations Command	9,000,000
Air Mobility Command	214,513,000
Air Staff	3,750,000
Pacific Air Forces	171,145,000
United States Air Force Academy	1,400,000
United States Air Forces Europe	603,000
11th Wing (Bolling AFB, Washington, D.C.)	27,624,000

Total	\$1,074,331,000
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# Assistance Team Visits by the Design Group Division in FY99

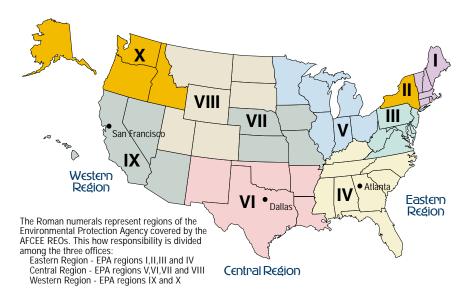
11th Wing	2
Air Combat Command	5
Air Education and Training Command	3
Air Force Materiel Command	2
Air Force Reserve Command	5
Air Force Space Command	4
Air Force Special Operations Command	2
Air Mobility Command	2
Air Staff	1
Pacific Air Forces	5
United States Air Force Academy	2
United States Air Forces Europe	3

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### Regional Environmental Office (REO)

AFCEE has a Regional Environmental Office in Dallas (Central Region), Atlanta (Eastern Region) and San Francisco (Western Region). These three REOs represent the Air Force before local, state, regional, and federal authorities. Their duties include assisting major commands and bases with environmental issues; providing Air Force environmental leaders with updates on environmental compliance status, trends, and problem areas; and managing all Air Force third party sites (TPS).

In addition, the REOs serve as the Department of Defense Regional Executive Agent in EPA Regions II, VI and X and as Air Force Regional Environmental Coordinator in all ten regions.





National honor - Ed Lopez, left, director of AFCEE's Central Regional Environmental Office in Dallas, and John Kamensky, deputy director of the National Partnership for Reinventing Government, hold the Hammer Award presented to AFCEE and other members of the Texas Pollution Prevention Partnership. Also on hand were AFCEE Director Gary Erickson, second from left, and Texas Natural Resource Conservation Commission Chairman Robert Huston.

# Eastern Region (CCR-A)

(Tel: 404.562.4205/Tollfree 888.610.7419)

The major commands and installations need timely and reliable information on new and emerging state environmental legislation and regulatory requirements. To address this need, legislative/regulatory review has been included as a key process in the REO Business Plans. It is identified as one of the most important services they provide to their customers. The process works this way: The REOs and the co-located Regional Counsel offices assemble, analyze, and summarize "new" and proposed legislative and regulatory environmental requirements by region and state in an executive summary/newsletter format soon after the end of each quarter. Each regional report may include national, regional and individual state information, keeping in mind that each state will not always have reportable material every quarter. The Regional Reports are prepared by the three Regional Environmental Offices for their respective regions and sent out to the major commands.

The Eastern Region office was host to two Air Force-Regulator Environmental Restoration Summits, which were attended by about 40 representatives from the EPA and state environmental agencies in regions 1, 2, 3 and 4. The meetings were very successful in solidifying working relationships with the regulatory community and gaining the regulators' support for Air Force restoration programs.

### Central Region (CCR-D)

(Tel: 214.767.4650/Tollfree 888.610.7418)

The Air Force is committed to effective environmental stewardship activities to maintain access to the air, land and water needed to sustain and improve our mission capability. This is accomplished through compliance with environmental regulations at federal, state, and/or local levels. Headquarters Air Force (ILEV) monitors overall progress in our efforts to comply with these regulations. The Dallas REO, with the assistance of our Systems Engineering and Technical Assistance (SETA) contract, assists ILEV by performing data collection, data input, validation, statistical analysis and review. This initiative has also developed application programs in support of AFCEE's environmental compliance role.

The Deputy Undersecretary of Defense for Environmental Security Data Call consists primarily of two semiannual data collections of approximately 80,000 data records as well as, to a lesser extent, two quarterly data collections, all in support of Air Force environmental programs. The Dallas REO and SETA contractor have designed and conducted numerous surveys to support data calls as well as products and services that continue to meet Air Force environmental requirements.

The Central Region office also was host to two Air Force-Regulator Environmental Restoration Summits. In attendance were about 84 representatives from the EPA and state environmental regulatory agencies in regions 5, 6, 7 and 8. The meetings were considered a success.

### Western Region (CCR-S)

(Tel: 415.977.8881/Tollfree 888.324.9254)

An Alaska Native coordinator, working through an interagency agreement between AFCEE and the EPA's Region 10, is serving as the Air Force's liaison to Alaska Native communities and tribes in the state. Stationed at the 611th Air Support Group, the coordinator first year's activities included taking part in the Community Relations Program Restoration Advisory Boards in eight Alaska Native communities and attending community meetings in four other Alaska Native villages located near Air Force installations. The coordinator provides training on Alaska Native issues, including cultural awareness, to the senior military leadership. The coordinator is a significant component of the 11th Air Force's and the 611th ASG's "government-to-government" programs with Alaskan tribes. The coordinator is a member also of the Alaska/DOD Policy Working Group that drafted guidance on tribal policy implementation for Alaska-based defense agencies.

The Western Region's Air Force-Regulator Environmental Summit was attended by about 65 representatives from the EPA Region 9 and 10, the Department of the Interior, the National Oceanic and Atmospheric Administration, regulatory agencies from eight Western states and territories and the major commands.

### Mission Support (MS)

(Tel: 210.536.2319/DSN 240.2319)

Although Mission Support's major role is to provide internal assistance to the AFCEE product directorates, it's Computer Systems Division (MSC) offers a wide-range of services associated with implementing and maintaining the Air Force-wide Environmental Restoration Program Information Management System (ERPIMS) and Geographical Information System (CIS) operations.

This is an overview of the amount of data the major commands provided that was placed in ERPIMS in FY 99:

Customer	Submissions Received	Records validated	Special data support
Air Combat Command	67	610,606	2
Air Education and Training Command	41	155,414	4
Air Force Base Conversion Agency	53	493,045	19
Air Force Materiel Command	105	2,349,434	33
Air Force Space Command	43	463,060	7
Air Force Special Operations Command	8	3,707	1
Air Mobility Command	31	226,948	15
Mass. Military Reservation	16	622,202	8
Pacific Air Forces Command	56	656,865	26

#### Other accomplishments:

- The division trained 56 students in all the commands.
- Answered 3,832 help desk queries.

#### In the area of GIS support:

- Division staff made 14 site visits to ACC, AFBCA, AMC and PACAF.
- Completed 111 projects for AFBCA, AFMC, AMC, AFSOC and PACAF.

#### Other services:

- Provided spatial data for installations in EPA Region IV.
- In an aircraft accident study conducted for Air Staff, the division researched, posted and plotted 213 incidents at 116 installations.
- Supported development of the Tri-Service Spatial Data Standard translator software for the CADD/GIS Technology Center in Vicksburg, Miss.

# Value of All Ongoing Work by Directorate

Customer	Environmental Restoration	Environmental Conservation and Planning	Environmental Quality	Design and Construction
Aeronautical Systems Center (AFMC)	18,400,000			
Air Combat Command	34,800,000	714,992	484,089	105,769,000
Air Education and Training Command	40,200,000	3,759,687	1,602,666	151,016,000
Air force Base Conversion Agency	451,000,000	10,549,623		
Air Force Center for Environmental Excellence	225,500,000	5,025,995		
Air Force District Washington	2,800,000		182,389	
Air Force Materiel Command	94,500,000	5,025,995	2,327,551	258,698,000
Air Force Reserve Command		63,966	410,027	
Air Force Space Command	76,000,000	1,685,272	1,083,356	130,813,000
Air Force Special Operations Command	5,700,000	198,744	74,881	9,000,000
Air Mobility Command	86,000,000	2,255,670	4,193,140	214,513,000
Air National Guard		390,692	565,784	
Air Staff		157,899	3,849,399	3,750,000
Pacific Air Forces	129,000,000	1,763,295	2,918,992	171,145,000
United States Air Force Academy	3,000,000		10,000	1,400,000
United States Air Forces Europe	19,500,000	719,821	1,646,479	603,000
11th Wing (Bolling AFB, D.C.)				27,624,000
NASA	1,500,000		188,584	
Other	14,200,100			

Totals	\$1,202,100,000	\$32,311,651	\$19,537,337	\$1,074,331,000
TOTUTO	Ψ1,202,100,000	Ψ02,011,001	Ψ10,007,007	Ψ1,07 4,001,000

